

identifying the patient as having a current *Helicobacter pylori* infection if the nucleic acid is present in an amount exceeding a reference amount.

2. (Amended) A method for detecting a *Helicobacter pylori* infection, the method comprising the steps of:

detecting a high-integrity *Helicobacter pylori* nucleic acid present in a patient sample;

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comparing an amount of high-integrity *Helicobacter pylori* nucleic acid present in the patient sample to an amount of a non-*Helicobacter pylori* nucleic acid present in the patient sample; and

identifying the patient as having a current *Helicobacter pylori* infection if the relative amount of high-integrity *Helicobacter pylori* nucleic acid and of non-*Helicobacter pylori* nucleic acid exceeds a reference relative amount.

3. (Amended) The method of claim 2, wherein the non-*Helicobacter pylori* nucleic acid is a human nucleic acid.

5. (Amended) The method of claim 2, wherein the patient sample is selected from the group consisting of stool, sputum, pancreatic fluid, bile, lymph, blood, urine, saliva, gastric juice, and vomitus.

8. (Amended) The method of claim 1, wherein the *Helicobacter pylori* nucleic acid is a DNA.

- A3*
9. (Amended) The method of claim 1, comprising the further step of adding an ion chelator to the patient sample such that the concentration of the ion chelator is at least 150 mM.

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18. (Amended) A method for detecting a *Helicobacter pylori* infection in a patient, the method comprising the steps of:

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detecting a human nucleic acid in a patient sample comprising shed cells or cellular debris; and identifying the patient as having disease if the length of the nucleic acid exceeds a reference length.

Please add the following new claims 19-23:

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19. (New) The method of claim 1, wherein the reference length is a length of 175 nucleotides.
 20. (New) The method of claim 1, wherein the reference amount is a detection threshold.
 21. (New) A method for detecting a *Helicobacter pylori* infection in a patient, the method comprising the steps of:

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amplifying, from a patient sample,
a first *Helicobacter pylori* nucleic acid and
a second, longer *Helicobacter pylori* nucleic acid,
detecting the amplified first and second *Helicobacter pylori* nucleic acids; and
identifying the patient as having a *Helicobacter pylori* infection if the amplified first and second *Helicobacter pylori* nucleic acids are detected.

22. (New) A method for detecting a *Helicobacter pylori* infection in a patient, the method comprising the steps of:

exposing a patient sample to an immobilized probe that hybridizes to *Helicobacter pylori* nucleic acids, thereby to immobilize a *Helicobacter pylori* nucleic acid, if present in the patient sample,

detecting the *Helicobacter pylori* nucleic acid; and